0751

c4

Syntex-Verona
MOD007452 154
7.1
Incineration
RAI 5-27-88

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

MAY 27 1988

MEMORANDUM

SUBJECT: Syntex, Verona/Denney MIS
May 18, 1988, Site Visit

FROM: Glenn Curtis GMC
REMD/SPFD

TO: Files

I. Denney MIS

I arrived at the MIS at 9:30 a.m. at which time I opportunely proceeded to a meeting with several Syntex officials (e.g., Ray Forrester, Bob Williams, Glenn Davis, Dave Norris and others from Palo Alto), Ralph Hazel, EPA, and Joe Tichansky (Fish-an-ski), Envirosponse Site Manager. Subsequent to the meeting, I was given a full tour of the active MIS unit. Information gained during my visit is listed below.

1. The MIS was running at record rate; 73,800 pounds were fed into the system on Tuesday. Total volumes fed since May 7 are provided on the Attachment A (updated through May 23). At best, the feed rate is approximately 30 cubic yards per day.

2. All but 20 of 196 drums have been delivered to the MIS.

3. A. The issue of modifying the soil/drummed residue mixing proportions and feed rates were discussed. If the current rates are not modified, it is anticipated that excess residue may be left after all Verona soils have been burned.

B. The modified mixing procedure will be to spread one drum of high chlorine content residue, cover that with 10 bobcat (or backhoe) scoops and then add one to two drums of the low/intermediate chlorine content residues. This material is mixed manually and fed into the conveyor.

C. Sludges from Syntex, Springfield, can be burned alone; soils from Verona or elsewhere will not be needed.

4. Concerns exist about repairs needed for the MIS unit. These include: 1) Refractory replacement, 2) Repair of vacuum

leaks and 3) Removal of fine material build-up in the secondary burner. Implementation of (3) would only require a slight cooldown, enough to facilitate material removal. This build-up has primarily been caused by the increase in feed rates.

5. Storage capacity at the MIS has been an issue. On the day of my visit, I observed the delivery and off loading of the third load of the day. It was stated that only one more truck load could be received at the MIS storage. This problem will likely be alleviated in the near future since excavation is slowing down. Excavation will be conducted on a much more controlled rate and may be handicapped by analytical data turnaround.

6. I observed the off loading of one truck load of soil. The truck was covered with a tarp which was strapped to the dump truck. The process consisted of the truck raising up the dump bed and the soil, which was contained in a large plastic bag, rolling off into the storage garage. The canvas tarp remained over the bed throughout. Minimal dust was generated during the process.

II. Syntex, Verona

I traveled to the Syntex, Verona site, arriving at 1:00 p.m. to observe lagoon excavation activities and discuss shipment of old soil samples from the Syntex Palo Alto, California lab. The following activities were observed.

1. Three areas within the lagoon had been or are in the process of being excavated. Two of the areas include the two 60 by 60 sections forecasted for excavation in the Syntex Remedial Alternatives Report. The third section located east, immediately adjacent to the two other sections, was found during verification sampling to contain 100 ppb dioxin.

2. A section under excavation (in the middle of the three sections) apparently contains at depth the old NEPACCO wastewater discharge pipe and would have received the direct discharge from former plant operations. This area contains significant accumulations of a (purple) maroon-colored soil/sludge material. Direct samples of this material revealed 600 ppb dioxin.

3. Several subareas within the lagoon and both the Burn and Irrigation areas have been sampled. However, sample results have not been received.

4. Several hundred soil samples which originated from Syntex, Verona, subsite areas have been manifested and shipped to

Syntex, Verona, from the Syntex Palo Alto lab with an anticipation to burn the material at the MIS. Only 15 samples contained greater than 20 ppb dioxin. Syntex anticipates burning both the jars and soils.

5. I talked with Gary Kepco at length regarding Syntex's performance. He felt that the Syntex efforts have been good. The Syntex efforts have been described as conservative, from the standpoint that extra time and effort have been taken to conduct samplying and excavation.

May 23 Update

As per Joe Tichansky, the MIS shut down at 7:00 p.m. on May 19 for repairs. A significant pressure drop in the system promoted the shut down. Repairs included removing the build-up of solids in the venturi throat between the primary and secondary burners and minor reworking of the refractory in the secondary.

The MIS was turned back on Saturday, May 28. The feeding of soils was initiated at 2:00 a.m. on Monday morning, May 30, at a rate of 2,500 to 3,000 pounds.

Joe estimated that 270 cubic yards (Bank volume) were in the MIS storage. Syntex is estimating a total of 450 to 500 cubic yards at completion.

UPDATE

Denney Farm MIS
Volume Processed

Date: May	Pounds(lbs) Processed	Total Pounds	Volume * -cu. yds.-
7	9,101	9,101	3.37
8	37,497	46,598	16.89
9	43,944	90,542	33.53
10	25,835	116,377	43.1
11	63,817	180,194	66.74
12	48,827	229,021	84.87
13	59,531	288,552	106.8
14	54,765	343,317	127.15
15	68,127	411,444	152.3
16	63,285	474,729	175.8
17	73,549	548,529	203.16
18	71,720	620,649	229.87
19	20,114	653,500	242.0

* Based on 2700 lbs/yd^3

Yellow

MAY 27 1988

MEMORANDUM

SUBJECT: Syntex, Verona/Denney MIS
May 18, 1988, Site Visit

FROM: Glenn Curtis
REMD/SPFD

TO: Files

I. Denney MIS

I arrived at the MIS at 9:30 a.m. at which time I opportunely proceeded to a meeting with several Syntex officials (e.g., Ray Forrester, Bob Williams, Glenn Davis, Dave Norris and others from Palo Alto), Ralph Hazel, EPA, and Joe Tichansky (Fish-an-ski), Envirosponse Site Manager. Subsequent to the meeting, I was given a full tour of the active MIS unit. Information gained during my visit is listed below.

1. The MIS was running at record rate; 73,800 pounds were fed into the system on Tuesday. Total volumes fed since May 7 are provided on the Attachment A (updated through May 23). At best, the feed rate is approximately 30 cubic yards per day.

2. All but 20 of 196 drums have been delivered to the MIS.

3. A. The issue of modifying the soil/drummed residue mixing proportions and feed rates were discussed. If the current rates are not modified, it is anticipated that excess residue may be left after all Verona soils have been burned.

B. The modified mixing procedure will be to spread one drum of high chlorine content residue, cover that with 10 bobcat (or backhoe) scoops and then add one to two drums of the low/intermediate chlorine content residues. This material is mixed manually and fed into the conveyor.

C. Sludges from Syntex, Springfield, can be burned alone; soils from Verona or elsewhere will not be needed.

4. Concerns exist about repairs needed for the MIS unit. These include: 1) Refractory replacement, 2) Repair of vacuum

WSTM:SPFD:REMD:Curtis:du CUR1-15 5/20/88

REMD	REMD
Curtis	Wright
Curtis	WRIGHT
5-23-88	5/27/88

leaks and 3) Removal of fine material build-up in the secondary burner. Implementation of (3) would only require a slight cooldown, enough to facilitate material removal. This build-up has primarily been caused by the increase in feed rates.

5. Storage capacity at the MIS has been an issue. On the day of my visit, I observed the delivery and off loading of the third load of the day. It was stated that only one more truck load could be received at the MIS storage. This problem will likely be alleviated in the near future since excavation is slowing down. Excavation will be conducted on a much more controlled rate and may be handicapped by analytical data turnaround.

6. I observed the off loading of one truck load of soil. The truck was covered with a tarp which was strapped to the dump truck. The process consisted of the truck raising up the dump bed and the soil, which was contained in a large plastic bag, rolling off into the storage garage. The canvas tarp remained over the bed throughout. Minimal dust was generated during the process.

II. Syntex, Verona

I traveled to the Syntex, Verona site, arriving at 1:00 p.m. to observe lagoon excavation activities and discuss shipment of old soil samples from the Syntex Palo Alto, California lab. The following activities were observed.

1. Three areas within the lagoon had been or are in the process of being excavated. Two of the areas include the two 60 by 60 sections forecasted for excavation in the Syntex Remedial Alternatives Report. The third section located east, immediately adjacent to the two other sections, was found during verification sampling to contain 100 ppb dioxin.

2. A section under excavation (in the middle of the three sections) apparently contains at depth the old NEPACCO wastewater discharge pipe and would have received the direct discharge from former plant operations. This area contains significant accumulations of a (purple) maroon-colored soil/sludge material. Direct samples of this material revealed 600 ppb dioxin.

3. Several subareas within the lagoon and both the Burn and Irrigation areas have been sampled. However, sample results have not been received.

4. Several hundred soil samples which originated from Syntex, Verona, subsite areas have been manifested and shipped to

Syntex, Verona, from the Syntex Palo Alto lab with an anticipation to burn the material at the MIS. Only 15 samples contained greater than 20 ppb dioxin. Syntex anticipates burning both the jars and soils.

5. I talked with Gary Kepco at length regarding Syntex's performance. He felt that the Syntex efforts have been good. The Syntex efforts have been described as conservative, from the standpoint that extra time and effort have been taken to conduct samplying and excavation.

May 23 Update

As per Joe Tichansky, the MIS shut down at 7:00 p.m. on May 19 for repairs. A significant pressure drop in the system promoted the shut down. Repairs included removing the build-up of solids in the venturi throat between the primary and secondary burners and minor reworking of the refractory in the secondary.

The MIS was turned back on Saturday, May 28. The feeding of soils was initiated at 2:00 a.m. on Monday morning, May 30, at a rate of 2,500 to 3,000 pounds.

Joe estimated that 270 cubic yards (Bank volume) were in the MIS storage. Syntex is estimating a total of 450 to 500 cubic yards at completion.

UPDATE

Denney Farm MIS
Volume Processed

Date: May	Pounds(lbs) Processed	Total Pounds	Volume * -cu. yds.-
7	9,101	9,101	3.37
8	37,497	46,598	16.89
9	43,944	90,542	33.53
10	25,835	116,377	43.1
11	63,817	180,194	66.74
12	48,827	229,021	84.87
13	59,531	288,552	106.8
14	54,765	343,317	127.15
15	68,127	411,444	152.3
16	63,285	474,729	175.8
17	73,549	548,529	203.16
18	71,720	620,649	229.87
19	20,114	653,500	242.0

* Based on 2700 lbs/yd^3